Name: _____

Date: _____

Creating Parallel Box and Whisker Plots of Foot Length in Excel

The following summary statistics of foot lengths have been calculated from the C@S data in C@SQ 35A. The statistics are used in the female and male tables below.

	min	Q1	med	Q3	max
Female	20	22	23	24	26
Male	22	23.75	26	27.25	30

Task:

1. Enter the following data including empty cells into an Excel spreadsheet.

females	*x*	*y*
min top	20	3
min bottom	20	1
Q1 top	22	3
Q1 bottom	22	1
med top	23	3
med bottom	23	1
Q3 top	24	3
Q3 bottom	24	1
max top	26	3
max bottom	26	1
box top left	22	3
box top right	24	3
box bottom left	22	1
box bottom	24	1
lower whisker	20	2
lower whisker	22	2
upper whisker	24	2
upper whisker	26	2

males	*x*	*y*
min top		6
min bottom		4
Q1 top		6
Q1 bottom		4
med top		6
med bottom		4
Q3 top		6
Q3 bottom		4
max top		6
Max bottom		4
box top left		6
box top right		6
box bottom left		4
box bottom right		4
lower whisker		5
lower whisker		5
upper whisker		5
upper whisker		5

2. Select the female data (numbers only) then select: Insert > scatterplot > scatter with straight lines.

3. Select: Layout > Axes >Primary Horizontal Axes > More Primary Horizontal > Axis Options, and choose an appropriate scale for your plot.

4. Use the female table as a guide to enter the males summary statistics into the
X column in the grid for males.

5. Leave a line then copy and paste the male data below the female data you have already entered.

6. Repeat Tasks 2 & 3 after selecting both female and male data.

7. What do we call this kind of plot? Where do you think it gets its name?

8. Explain how you would create a third plot above the male plot?

Extension: *Activity C@SQ_35C is an extension to this lesson.*